

SEMICONDUCTOR ACCELERATION SENSOR

Abstract

A semiconductor acceleration sensor includes a non-single-crystal-silicon-based substrate, an insulating beam structure having a movable section and a stationary section, at least one piezoresistor positioned on the beam structure, an insulating supporter positioned on the non-single-crystal-silicon-based substrate for fixing the stationary section of the beam structure and forming a distance between the beam structure and the non-single-crystal-silicon-based substrate, and a thin film transistor (TFT) control circuit positioned on the non-single-crystal-silicon-based substrate and electrically connected to the piezoresistor and the beam structure.